

REMARKS

The aforementioned claim amendments are provided to more clearly recite what Applicant considers the invention to be in terms presented more clearly and concisely such that the sheet and image forming method are considered to be patentably distinguishable over the prior art of record.

Newly added claims 9-12 are provided directed to a sheet (9-10), an image forming method using said sheet (11) and an image forming apparatus (12).

Appropriate basis for including these claims can be found in the written description on page 16; lines 14-12 and Figure 2.

Claims 5-7 have been amended in a manner such that Applicant believes that the image forming method of claims 5 and 6 and the image forming apparatus of claim 7 are stated in a manner such that they are readily understandable to the person of ordinary skill in the art and can be readily reproduced or practiced. The claims are presented in a manner whereby the sheet of claim 1 in combination with the method and apparatus of claims 5 and 6 and claim 7 respectively provide both novel and unobvious features without burdening the Examiner, Office or reader of these claims alone and in view of the entire teaching embodied in the written description, with the lengthy language of claim 1 defining Applicant's inventive sheet.

In view of the fact that the method and apparatus of the claims in question recite a combination of a sheet in said method and apparatus, and the claims defining the sheet are asserted to be both novel and unobvious over the prior art of record, the skilled person would

readily recognize all of the requirements of claims 5-7 such that the method and apparatus are capable of easy reproduction without undue experimentation.

In support of the present invention as defined in the claims as presently amended and provided hereinabove, Applicant provides the following comments in favor of the patentability of the amended claims.

As now defined in the amended claims of the present invention, the identifying mark of the sheet for forming an image of claim 1 is defined as constituting a combination of a sequence of mark bits constituting a first mark A and a sequence of mark bits constituting a second mark B. The first mark A has a cycle period of a natural number X, the second mark B has a cycle period of a natural number Y, wherein Y is different from X and relatively prime with X. The first mark A and the second mark B are also different from each other. As mentioned in Fig. 4(C) of the specification, the identifying mark of the sheet for forming an image of claim 1 has a mark AB (a1b1) with, for example, 12 unit frames of cycle period which is synthesized by combination of a mark A (a1) of which cycle period is 3 unit frames and a mark B (b1) of which cycle period is 4 unit frames.

In the present invention, as exemplified in Figs. 2(A) and 2(B) of the specification, the identifying mark of the sheet for forming an image of claim 9 is characterized by that the identifying mark is constituted of a combination of two sequences of mark bits (the first mark A and the second mark B) which have same cycle period, but are different from each other in sequence of the mark bits per one cycle period along with the longitudinal direction; this is, in the repeating pattern in a longitudinal direction per one cycle period.

In this way, the identifying mark of the present invention is constituted of a combination of the sequences of mark bits of the first mark A and the second mark B.

In contrast, in Sasaki et al., identifying mark 66 is a head mark provided in a mark section 67 and 80 is a bar code written in the head section 67 for recording used or used information on color ink resin layer section. Marks 66 and 80 are both identifying marks that are different in function. Sasaki et al. is different from the instantly claimed invention in that nothing is finally identified by combining a first mark A (66, 80) and a second mark B (66) and an identifying mark is not formed by a sequence constituted of a combination of the first mark A (66) and the second mark B (80).

In Sasaki et al., the head mark 66 is always provided in the mark section 67. On the other hand, the bar code 80 is a mark for recording used or unused information on color ink resin layer sections so that normally it is provided sequentially in every mark section 67 having a cycle period same as the head mark 66 or is randomly provided without a specified cycle period. Thus, in the Sasaki et al. reference, it is known that the bar code 80 has either a cycle period which is partially same as 66 or has no cycle period in a longitudinal direction.

As mentioned above, Applicant's claimed invention as embodied in the claims provided hereinabove is completely unexpected and not taught, much less contemplated, in the Sasaki et al. reference that the bar code 80 has a cycle period Y different from a cycle period X of the head mark 66 and relatively prime with said cycle period X.


Further, in Sasaki et al., when the bar code 80 is provided in the mark section 67 as with the head mark 66, the bar code 80 has partly the same cycle period as the head mark 66.

However, it is completely unexpected and never taught in Sasaki et al. and neither contemplates nor discloses what Applicant has identified and exemplified in Figs. 2(A) or 2(B), a new identifying mark is constituted by combining two sequences of mark bits (the first mark A and the second mark B) of which patterns in a longitudinal direction (the repeating pattern) per cycle period are different from each other.

For all of these reasons, it is submitted that the claimed invention is patentable over Sasaki. Applicant respectfully requests favorable reconsideration.

Respectfully Submitted,

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